12. (Amended) A method of forming a solder ball contact, comprising:

forming a metal contact pad on a substrate;

forming an insulating layer on the metal contact pad;

removing a portion of the insulating layer to expose a portion of the metal contact pad, thereby forming an exposed portion of the metal contact pad, the exposed portion having a predetermined diameter;

adsorbing reactants on the exposed portion of the metal contact pad;

reacting the reactants on the exposed portion of the metal contact pad, thereby forming a solder contact; and

annealing the solder contact to form a solder ball contact.

13. (Amended) A method of forming a solder ball contact, comprising:

forming a metal contact pad on a substrate;

forming an insulating layer on the metal contact pad;

forming a resist layer on the insulating layer;

patterning the resist layer to define a future exposed portion of the metal contact pad;

removing a portion of the insulating layer to expose a portion of the metal contact pad, thereby forming the exposed portion of the metal contact pad, the exposed portion having a predetermined diameter;

electrolytically depositing solder on the exposed portion of the metal contact pad, thereby forming a solder contact;

removing the resist layer, thereby exposing the solder contact above a surface of the insulating layer; and

annealing the solder contact to form a solder ball contact.

16. (Amended) A method of forming a solder ball contact, comprising:

forming a metal contact pad on a substrate;

forming an insulating layer on the metal contact pad;

forming a resist layer on the insulating layer;

patterning the resist layer to define a future exposed portion of the metal contact pad;